

Claims

1. (presently amended) A method of manufacturing a thin film disk comprising the steps of:
 - recording a first timestamp for the end of thin film deposition for the disk;
 - waiting a predetermined time after the first timestamp ~~to allow the thin film surface to stabilize~~;
 - applying a lubricant to the disk after the predetermined time has elapsed;
 - recording a second timestamp for applying the lubricant to the disk;
 - checking the second timestamp and rejecting the disk if a selected time period has been exceeded since the lubricant was applied, then performing an abrasive polishing of the disk if the selected time period has not been exceeded since the lubricant was applied; and
 - performing a glide test on the disk.
2. (previously presented) The method of claim 1 wherein the waiting step further comprises placing the disk at a designated location and using a timing aid to alert an operator when the disk is ready for lubrication.
3. (previously presented) The method of claim 1 wherein the lubricant has a perfluoropolyether backbone.
4. (presently amended) The method of claim 1 wherein the lubricant has an end group comprising ~~X-CF₂-O-(CF₂-CF₂-O)_p-(CF₂O)_q-CF₂-X~~ structure with X being ~~—CH₂OCH₂CH(OH)CH₂OH~~.
5. (presently amended) The method of claim 1 wherein the lubricant comprises perfluoropolyether ~~is Fomblin Z-TETRAOL~~.
6. (previously presented) The method of claim 1 wherein the disk has a thin film overcoat of diamond-like carbon.

7. (presently amended) The method of claim 1 wherein the disk has a thin film overcoat comprising carbon and hydrogen of CH_x.
8. (presently amended) The method of claim 1 wherein the disk has a thin film overcoat comprising carbon and nitrogen of CN_x.
9. (presently amended) A method of manufacturing thin film disks comprising the steps of:
- depositing at least one thin film on a disk;
 - reading an identifier from a carrier containing the disk;
 - recording a first timestamp indicative of a time when thin film deposition was completed, the first timestamp being recorded with the identifier in an automated database;
 - holding the carrier for a predetermined time ~~to allow a surface of the thin film to stabilize;~~
 - after the predetermined time has elapsed, applying a lubricant to the disk;
 - recording a second timestamp with the identifier in an automated database, the second timestamp being indicative of a time when the lubricant was applied; and
 - reading the identifier and rejecting the disk if more than a selected time period has elapsed after the lubricant was applied or else performing an abrasive polishing of the disk.
10. (previously presented) The method of claim 9 wherein the holding step further comprises placing the disk at a designated location and using a timing aid to alert an operator when the disk is ready for lubrication.
11. (previously presented) The method of claim 9 wherein the lubricant has a perfluoropolyether backbone.

12. (presently amended) The method of claim 9 wherein the lubricant has an end group comprising $X-CF_2-O-(CF_2-CF_2-O)_p-(CF_2O)_q-CF_2-X$ structure with X being $-CH_2OCH_2CH(OH)CH_2OH$.

13. (presently amended) The method of claim 9 wherein the lubricant comprises perfluoropolyether is Fomblin Z-TETRAOL.

14. (previously presented) The method of claim 9 wherein the disk has a thin film overcoat of diamond-like carbon.

15. (presently amended) The method of claim 9 wherein the disk has a thin film overcoat comprising carbon and hydrogen of CH_x .

16. (presently amended) The method of claim 9 wherein the disk has a thin film overcoat comprising carbon and nitrogen of CN_x .